






ACTIVITY 2





THE RAIN FOREST IS ALIVE

This activity uses role-playing and empathy to encourage students to learn about the life and purpose of the rain forest. Students create stick puppets to represent animal inhabitants of a South American rain forest and use the puppets to act out the story in “The Great Kapok Tree.” The activity serves as a useful illustration of how to adapt environmental reading material for classroom learning. It is related to the warm-up exercise called “Learning from Stories.”

CRITICAL OBJECTIVES

-  Appreciate that animals, plants, and humans need each other to maintain the balance in nature
-  Work with others on environmental projects
-  Understand that the destruction of the rain forests may cause some animals to become extinct
-  Recognize that plants and trees in rain forests absorb carbon dioxide
-  Recognize that carbon dioxide absorption is important in regulating climate

SKILLS

-  Asking questions
-  Cooperating with others
-  Coloring, cutting, pasting
-  Acting out

GUEST PRESENTERS

Guest presenters for this activity could include EPA environmental protection specialists, conservationists, or environmental scientists.

BACKGROUND

Rain forests are very large and very dense. They are usually in tropical areas—areas near the equator where the temperature is very warm and where rain is very heavy throughout the year. The largest tropical rain forest covers a large part of South America, including the Amazon River and parts of the country of Brazil. Rain forests are made up mainly of evergreens (trees and shrubs that have leaves or needles all year round), but they also are the home for many rare flowering plants, ferns, and herbs. In addition, rain forests provide a habitat for a rich variety of animals and have been the home for many people throughout history.



RELATED WARM-UP

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REFER TO READING MATERIAL

“Greenhouse Effect”

TARGET GRADE LEVEL

K-2nd

DURATION

1 class period (40 minutes) to create puppets;

1 class period (40 minutes) for role-play exercise

VOCABULARY

Carbon dioxide

Climate

Rain forest

MATERIALS

Brown paper (3 ft. by 6 ft.)

Green construction paper (optional)

Popsicle sticks (1 per student)

Crayons or marking pens in various colors

Scissors

Clear tape

Glue or stapler and staples

“The Great Kapok Tree” by Lynne

Cherry

WORKSHEETS INCLUDED

20

All rain forests have five main layers, and each layer is populated with plant and animal life specifically suited to it. The Emergent layer is made up of the tallest trees, some as high as 165 feet. In this layer, Harpy eagles and other birds of prey watch for animals to feed on, and it is here that the "great kapok tree" in the story grows. The Canopy is 100 to 130 feet above ground and about 30 feet thick. The majority of plants, vines, and animal life is found in this layer. The Understory, made up of the tops of small trees, gets less light than the Canopy. Palm trees are typical of growth in this layer. The Shrub layer contains shrubs and small trees. Sunlight can reach this layer and help the plants to grow wherever there is a gap in the Canopy. The Herb layer, closest to the ground, is made up of ferns and herbs. It is the habitat for ground dwelling animals, such as the tapir, and many varieties of insects.

Tropical rain forests play an important role in regulating the world's climate by rapidly recycling dead plants and by absorbing carbon dioxide that is produced when humans breathe, coal and other materials are burned, and exhaust is emitted by car engines. Without the rain forests our climate could change, causing droughts, damaging food crops, and causing some types of animal life to die out. In addition, rare animals could become extinct without the rain forest, and rare plant life, useful in making many medicines for treating human diseases, could disappear. (See the reading material called "Greenhouse Effect.")

Many rain forests are being destroyed because people are cutting them down, using the plants and trees to produce products like rubber, oils, medicines, and dyes, and clearing the land for timber and farming. This not only affects the environmental balance but also has caused people, like Brazil's Indian population, to be driven from their homes.

A number of organizations have programs to help save the rain forests. Some give deeds as tokens for monetary contributions that they use to buy up rain forest land to protect it from destruction. Information about these organizations should be available in the local library. Organizations that provide information about how to help save rain forests and the animals, insects, and people who live in them are listed below.

- Friends of the Earth (FOE), Earth Action (the youth section), 530 7th St., NE, Washington, DC 20003
- Rainforest Action Network, 466 Green St., San Francisco, CA 94133
- Defenders of Wildlife, 1244 19th St., NW, Washington, DC 20036
- World-Wide Fund for Nature (WWF), 1250 24th St., NW, Washington, DC 20037
- Survival InterNational, 2121 Decatur Place, NW, Washington, DC 20008
- Intermediate Technology, 777 United Nations Plaza, New York, NY 10017



WHAT TO DO

Before class begins

Make enough copies of the worksheets so that the class will have the following:

1 Boa Constrictor	1 Cock of the Rock	1 Bumble Bee
1 Tree Frog	4 Night Monkeys (Troupe)	1 Hummingbird
1 Leaf Cutter Ant	1 Jaguar	1 Tarantula
1 Iguana	1 Amazonian Umbrella Bird	2 Anteaters
1 Scarlet Macaw	1 Three-Toed Sloth	1 Macaw
4 Tree Porcupines	1 Black-handed Monkey	1 Ocelot
1 Butterfly	1 Blue Morpho Butterfly	

Other characters will include two men and one child. These characters will be acted out by the students.

When class begins

1. Show the class the map of South America inside "The Great Kapok Tree." Explain the make-up of rain forests.
2. Read the story of "The Great Kapok Tree" to the class.
3. Have students draw and color a kapok tree on the brown paper. (If you have green construction paper, have students draw leaves, cut them out, and glue or staple them on the tree.) The picture will be used as background for the role-playing activity.
4. Have each student choose a picture of one of the rain forest animals or insects from the selection included at the back of this activity. (You may prefer to copy or paste the pictures onto more rigid material before using them in class.) Have students color their pictures using the illustrations in the book as examples. When the pictures have been colored, have students cut out and glue or staple their pictures to a Popsicle stick to make a puppet.
5. While the students are making their puppets, tape the picture of the kapok tree to a wall in the classroom that has enough room in front of it for all the students to sit.
6. Gather the students with their puppets in front of the tree and read the story again. Have students use their puppets to act out the story as you read it. At the end of the story, discuss the importance of the rain forests to humans and to the Earth's environment. Use some of the following questions to stimulate discussion:








How tall do you think the great kapok tree is?

How can all these animals and insects live in just one tree?

How are rain forests important to you?

What can you do to help save our rain forests?

SUGGESTED MODIFICATIONS

-  In making puppets, a number of options exist. The puppet idea and pictures included can be modified depending on the type of class, skills of students, and willingness of the teacher. Modifications include making face masks using colored construction paper and crayons or using papier maché and tempera paints; creating the animals' and insects' shapes using glued-together pieces of construction paper; or creating a coloring book. Pictures of animals and insects cut from magazines also may be used in addition to or in place of the included pictures.
-  If the students become proficient with the puppet show, consider presenting the show for other classes and for parents on a Parents' Night.
-  Take students on a field trip to see rain forest exhibits at local zoos, museums, or botanical gardens.
-  Use this activity as a model for adapting other environmental stories, such as those listed in the Warm-up exercise called "Learning from Stories."
-  For students proficient at reading, encourage them to read all or parts of the story.
-  For higher grades, students need not make paper puppets. They can use face paints to paint their own faces with a schoolmate or alone. They can paint one hand and arm to resemble the species, and using their painted arm as the puppet.
-  Encourage students to empathize with their species and learn more about them.

STUDENT WORKSHEET 1
THE RAIN FOREST IS ALIVE
BOA CONSTRUCTOR

STUDENT WORKSHEET 2
THE RAIN FOREST IS ALIVE
BUMBLE BEE

STUDENT WORKSHEET 3
THE RAIN FOREST IS ALIVE
NIGHT MONKEY (MAKE 4)

STUDENT WORKSHEET 4
THE RAIN FOREST IS ALIVE
LEAF CUTTER ANT

STUDENT WORKSHEET 5
THE RAIN FOREST IS ALIVE
TARANTULA

STUDENT WORKSHEET 6
THE RAIN FOREST IS ALIVE
AMAZONIAN UMBRELLA BIRD

STUDENT WORKSHEET 7
THE RAIN FOREST IS ALIVE
SCARLET MACAW

STUDENT WORKSHEET 8
THE RAIN FOREST IS ALIVE
MACAW

STUDENT WORKSHEET 9
THE RAIN FOREST IS ALIVE
COCK OF THE ROCK

STUDENT WORKSHEET 10
THE RAIN FOREST IS ALIVE
TREE FROG

STUDENT WORKSHEET 11
THE RAIN FOREST IS ALIVE
HUMMINGBIRD

STUDENT WORKSHEET 12
THE RAIN FOREST IS ALIVE
JAGUAR

STUDENT WORKSHEET 13
THE RAIN FOREST IS ALIVE
IGUANA

STUDENT WORKSHEET 14
THE RAIN FOREST IS ALIVE
ANTEATER (MAKE 2)

STUDENT WORKSHEET 15
THE RAIN FOREST IS ALIVE
THREE-TOED SLOTH

STUDENT WORKSHEET 16
THE RAIN FOREST IS ALIVE
TREE PORCUPINE (MAKE 4)

STUDENT WORKSHEET 17
THE RAIN FOREST IS ALIVE
BUTTERFLY

STUDENT WORKSHEET 18
THE RAIN FOREST IS ALIVE
OCELOT

STUDENT WORKSHEET 19
THE RAIN FOREST IS ALIVE
BLUE MORPHO BUTTERFLY

STUDENT WORKSHEET 20
THE RAIN FOREST IS ALIVE
BLACK-HANDED MONKEY